GP-303011

BLOW-FORMING FLASK AND TOOL ASSEMBLY

ABSTRACT OF THE DISCLOSURE

A flask and tool assembly includes a forming tool insert that is housed within an insulated flask having four vertical sides. An insulation enclosure surrounds the flask and the flask contains a heater plate for contacting the bottom of the forming tool insert. The tops of the sides of the flask provide surfaces for gripping bottom edges of a sheet metal blank to be formed. A cover for the tool-containing flask provides complementary gripping surfaces for top edges of the sheet metal blank and defines a chamber above the sheet metal blank for pressurized forming gas. A peripheral seal underlies the sheet metal blank and bridges a space between the outer side surfaces of the forming tool insert and the inner surfaces of the sides of the flask, thereby obviating the need to provide a precision fit between the flask and forming tool insert.